# WATER NOTES:

#### 7-09 WATER MAINS

#### Section 7-09.2; Materials

Paragraph 1 is replaced with the following:

Materials shall meet the following sections:

Pipe	9-30.1
Ductile Iron Pipe (Restrained Joint)	9-30.1(1)
Fittings	9-30.2
Ductile Iron Pipe	9-30.2(1)
Restrained Joints	9-30.2(6)
Bolted Sleeve-Type Couplings for Plain End Pipe	9-30.2(7)
Valves	9-30.3
Gate Valves (3 inches to 10 inches)	9-30.3(1)
Butterfly Valves (12 inches and greater)	9-30.3(3)
Valve Boxes	9-30.3(4)
Valve Marker Posts	9-30.3(5)
Valve Stem Extension	9-30.3(6)
Combination Air Release Valves	9-30.3(7)
Tapping Sleeve and Valve Assembly	9-30.3(8)
Hydrants (All bolts and nuts to be stainless steel with	9-30.5
Anti-seize Compound)	
Service Connections (2 inches and Smaller)	9-30.6

All Ductile Iron Pipe, fittings and appurtenances shall have restrained joints by the use of Mega-Lugs, Romac Grip Rings, Field-Lock gaskets, or approved equal.

Bolts and nuts for flanged pipe and fittings shall conform in size and length with ANSI/AWWA C115/A21.15. All bolts and nuts shall be made from COR-TEN steel in accordance with ANSI/AWWA C111/A21.11.

All fittings to have thrust blocks as indicated in City Standard Plans.

Note: The City reserves the right for any or all salvage rights to any existing materials removed including but not limited to fire hydrants, crosses, tees, gate valves or pipe.

It shall be determined by the City as to what materials will be salvaged.

Any material requested for salvage will be delivered by the contractor to the City's operation center as directed by the City.

All costs associated with delivery or removal and disposal shall be borne by the contractor.

### 7-09.3 Construction Requirements Section 7-09.3(5); Grade and Alignment

This section is supplemented with the following:

A minimum horizontal separation of 10 feet between sanitary sewers and any existing potable water lines, and a minimum vertical separation of 18 inches between the bottom of the water line and the crown of the sewer, shall be maintained. The distance shall be measured edge to edge. Sewer line should be lower than water line and installed in separate trenches.



## **WATER SPECIFICATIONS (1 OF 5)**

STANDARD PLAN: CITY ENGINEER APPROVAL: **W - 700** C.B. Longview:

DATE: **FEB. 2008** Kelso: S.Z.